

Amendment to the Specification

DEP 9/24/07
DEP 9/24/07

Amend paragraphs ⁰¹⁰⁹~~[0097]~~ and ⁰¹¹⁰~~[0098]~~ as follows.

⁰¹⁰⁹~~[0097]~~ The most important advantage of decoupling the 2-DOF drive oscillator 12 and sense-mode oscillator 36 is that the Coriolis force that excites the sensing element 20 is not generated by the sensing element 20. Instead, $F_{c2} = 2 m_2 \omega_z dx_2/dt$ generated by mass 18 excites the active mass ~~16~~20. The dynamics of the 2-DOF oscillator dictates that the passive mass 20 has to be minimized in order to maximize its oscillation amplitude. Since the Coriolis Force $F_{c3} = 2 m_2 \omega_z dx_2/dt$ generated by mass 20 is not required to be large, the sensing element 20 can be designed to be as small as the mechanical design requirements and fabrication parameters allow.

DEP 9/24/07

⁰¹¹⁰~~[0098]~~ Similarly, the optimal mass ratio $\mu_y = m_3/m_2$ in the sense direction determining the mass of the active mass 18 is selected to achieve insensitivity to damping variation, a wide response bandwidth and a large oscillation amplitude. The optimal ratio of the resonance frequencies of the isolated active system involving mass 20 and passive mass-spring system involving mass 18, $\gamma_y = \omega_{3y}/\omega_{2y} = (k_{3y}m_2/k_{2y}m_3)^{1/2}$ is also selected to maximize oscillation amplitudes of passive mass ~~18~~20.